

**In the claims:**

All standing claims are reproduced below with status indication appropriately marked.

Claims 19, 22 - 24, 29 and 34 are currently amended.

Claims 1-18, 26 and 28 are canceled.

19. (Currently Amended) An Internet-enabled control system for monitoring and controlling home-automated-systems and appliances at a user's premise, comprising:  
a base station with Internet connection at the user's premise, the base station in communication with sensing and actuating subsystems ~~at~~ associated with individual ones of the home-automated systems and appliances via radio frequency technology;  
~~wherein all communication with sensing and actuating subsystems is done through~~  
a control unit comprising a wiring interface portion, ~~and an input-output section, a RF section comprising a redundancy-based networking protocol, coupled to a microcontroller comprising control code, wherein the control unit is in communication with the base station via the RF section and in communication with the sensing and actuating subsystems via the wiring interface or the RF section;~~  
a first Internet-connected server, comprising a software-control module for enabling a user to monitor and control home automated systems and appliances, communicating over the Internet with the base station, the first Internet-connected server monitoring the sensing subsystems and providing actuating commands to the actuating subsystems through the base station;  
~~an interactive display at a second Internet-connected server providing a set of services to the user not related to control of the home automated systems and appliances;~~

and

~~an interactive control interface presentable on the interactive display by the second Internet-connected server, providing a control interface to the user, enabling the user to access settings, view conditions, and issue commands to the home automated systems and appliances over the Internet to the first server and hence to the base station and the systems and appliances themselves~~ such that the control unit produces control outputs for a particular home automated-system or appliance in response to input from sensing subsystems associated with the particular home automated-system or appliance and in response to other sensors associated with other home automated-systems or appliances as determined by the software-control module and the control code and wherein the redundancy-based networking protocol comprises a state wherein if one control unit is out of communication range with the base station another control unit may intercept communication on behalf of the out-of range control unit and retransmit to the out-of range control unit.

20. (Previously presented) The system of claim 19 wherein accessing the interactive control interface requires entry of a password.

21. (Previously presented) The system of claim 19 wherein accessing the interactive control interface requires verifying the identity of the user or an Internet appliance controlled by the user.

22. (Currently amended) The system of claim 19 further comprising an interactive display at a second Internet-connected server providing a set of services to the user not related to control of the home-automated systems and appliances; and  
an interactive control interface presentable on the interactive display by the second Internet-

connected server, providing a control interface to the user, enabling the user to access settings, view conditions, and issue commands to the home automated systems and appliances over the Internet to the first server and hence to the base station and the systems and appliances themselves wherein the interactive interface comprises a window opened in the interactive display provided by the second server, the window providing information fields and input fields for the user to read conditions at and to provide input to the systems and appliances.

23. (Currently amended) The system of claim ~~19~~ 22 wherein the set of services provided by the second server comprise one of banking services, search services, security exchange services, or personal data aggregation services.

24. (Currently amended) A method for remotely controlling home-automated-systems and appliances at a user's premise, comprising steps of:  
providing an interactive display ~~for monitoring and control of the systems and appliances at a first web site, comprising a software-control module for enabling a user to monitor and control home-automated-systems and appliances, dedicated to providing a set of services to the user unrelated to the monitoring and control services;~~  
authenticating the user at the web site to activate the interactive display; ~~and~~  
establishing Internet communication from the first web site to ~~a second web site dedicated to monitoring and controlling the systems and appliances through Internet communication with~~ a base station at the user's premise, the base station in communication with ~~the systems and appliances, wherein all communication with~~

~~the systems and appliances is done through a control unit comprising a wiring interface portion, and an input-output section, coupled to a microcontroller; thereby enabling the user to read conditions and to provide commands to the systems and appliances while connected to the first web site~~

sensing and actuating subsystems associated with individual ones of the home-automated-systems and appliances via radio frequency technology; and communicating with the sensing and actuating subsystems through a control unit comprising a wiring interface portion, a RF section comprising a redundancy-based networking protocol, an input-output section, and a microcontroller comprising control code, wherein the control unit is in communication with the base station via the RF section and in communication with the sensing and actuating subsystems via the wiring interface or the RF section; such that the control unit produces control outputs for a particular home-automated-system or appliance in response to input from sensing subsystems associated with the particular home automated-system or appliance and in response to other sensors associated with other home automated-systems or appliances as determined by the software-control module and the control code and wherein the redundancy-based networking protocol comprises a state wherein if one control unit is out of communication range with the base station another control unit may intercept communication on behalf of the out-of range control unit and retransmit to the out-of range control unit.

25. (Previously presented) The method of claim 24 wherein the authentication comprises a password.

26. (Cancelled) The method of claim 24 wherein the authentication is by a prearrangement with the second web site verifying the identity of the user or an Internet appliance controlled by the user.

27. (Previously presented) The method of claim 24 wherein the interactive display comprises a window providing information fields and input fields for the user to read conditions at and to provide input to the systems and appliances.

28.( Cancelled) The method of claim 24 wherein the set of services provided by the second server comprise one of banking services, search services, security exchange services, or personal data aggregation services.

29. (Currently amended) An internet-enabled control system for monitoring and controlling home-automated-systems and appliances at a user's premise, comprising:

an actuating subsystem;

a sensing subsystem;

a base station comprising a microcontroller, memory portion, communication port, and a RF

communicating section in communication with the sensing and the actuating

subsystems associated with individual ones of the home-automated systems and

appliances via radio frequency technology;

a first internet-connected server comprising a software-control module for enabling a user to

monitor and control home-automated-systems and appliances communicating with

the base station; and

~~at least one~~ a control unit comprising a microcontroller comprising control code, an input-output section, a memory portion, a wiring interface portion and a RF communicating section comprising a redundancy-based networking protocol wherein the control unit is in communication with the base station via the RF section and in communication with the sensing and actuating subsystems via the wiring interface or the RF section;

~~at least one~~ actuator; and

~~at least one~~ sensor; ~~wherein the base station receives control code and data via the communication port and communicates via the RF section to the at least one control unit such that each control unit communicates to the at least one actuator and to the at least one sensor in order that the home automated systems and appliances are controlled in a preset manner by the received control code and data, wherein all communication with the at least one actuator and the at least one sensor is done through the at least one control unit such that the control unit produces control outputs for a particular home automated-system or appliance in response to input from sensing subsystems associated with the particular home automated-system or appliance and in response to other sensors associated with other home automated-systems or appliances as determined by the software-control module and the control code and wherein the redundancy-based networking protocol comprises a state wherein if one control unit is out of communication range with the base station another control unit may intercept communication on behalf of the out-of range control unit and retransmit to the out-of range control unit.~~

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30. (Previously Presented) The system of claim 29 further comprising an interactive display in communication with said base station providing a set of services via said first Internet-connected server to said user to control said home-automated systems and appliances wherein said first Internet-connected server monitors each control unit and provides actuating commands to each control unit through the base station.

31. (Previously Presented) The system of claim 30 further comprising an interactive control interface presentable on the interactive display by said first Internet-connected server, providing a control interface to said user, enabling said user to access settings, view conditions, and issue commands via said base station RF communicating section to each said control unit.

32. (Previously presented) The system of claim 31 wherein said interactive interface further comprises a window opened in the interactive display wherein access to additional services comprising at least one of banking services, search services, security exchange services, purchasing services, repair services or personal data aggregation services is provided.

33. (Previously Presented) The system of claim 32 further comprising access to a second Internet-connected server wherein the second Internet-connected server provides access to at least one of said additional services.

34. (Currently amended) An Internet-enabled control system for monitoring and controlling home-automated-systems and appliances at a user's premise, comprising:  
a base station with Internet connection at the user's premise, the base station in

communication with sensing subsystems and actuating subsystems at individual ones of the home-automated systems and appliances via radio frequency technology;  
~~wherein all communication to the sensing subsystems and actuating subsystems is done through~~  
a control unit comprising a wiring interface portion, ~~and an input-output section, coupled to~~  
a microcontroller comprising control code, and a RF communicating section comprising a redundancy-based networking protocol wherein the control unit is in communication with the base station via the RF section and in communication with the sensing and actuating subsystems via the wiring interface or the RF section;  
first Internet-connected server communicating over the Internet with the base station, the first Internet-connected server monitoring the sensing subsystems and actuating subsystems and providing actuating commands to the actuating subsystems through the base station;  
an interactive display at the Internet-connected base station providing a set of services to the user related to the control and monitoring of the home-automated systems and appliances; and  
an interactive control interface presentable on the interactive display by the first Internet-connected server, providing a control interface to the user, enabling the user to access settings, view conditions, and issue commands to the home automated systems and appliances over the Internet to the base station and the systems and appliances themselves such that the control unit produces control outputs for a particular home automated-system or appliance in response to input from sensing subsystems associated with the particular home automated-system or appliance and



in response to other sensors associated with other home automated-systems or appliances as determined by the software-control module and the control code and wherein the redundancy-based networking protocol comprises a state wherein if one control unit is out of communication range with the base station another control unit may intercept communication on behalf of the out-of range control unit and retransmit to the out-of range control unit.

35. (Previously Presented) The system of Claim 34 wherein said interactive display is hosted by a second Internet-connected server providing a set of services to the user related to control of the home-automated systems and appliances; and an interactive control interface presentable on the interactive display by the second Internet-connected server, providing a control interface to the user, enabling the user to access settings, view conditions, and issue commands to the home automated systems and appliances over the Internet to the first Internet-connected server and hence to the base station and the systems and appliances themselves.

36. (Previously Presented) The system of Claim 35 wherein said interactive display is hosted at a second Internet-connected server providing a set of services to the user unrelated to control of the home-automated systems and appliances; and an interactive control interface presentable on the interactive display by the second Internet-connected server, providing a control interface to the user, enabling the user to access settings, view conditions, and issue commands to the home automated systems and appliances over the Internet to the first Internet-connected server and hence to the base station and the systems and appliances themselves.

## REMARKS and ARGUMENTS

This response is to the Office communication mailed in the above-referenced case on July 17, 2008.

**1.0** Claims 19, 22 - 24, 29 and 34 are currently amended and claims 26 and 28 are cancelled in response to Examiner's arguments.

**1.1** Support for amended claims may be found in the specification as follows:

**1.1.1 control units** pg. 5, L 1-5.

**1.1.2 RF technology** pg. 5, L 15-25; pg. 10, L21; pg.12, L35-39.

**1.1.3 software control module** pg. 6, L 14 -25.

**1.1.4 control outputs** pg. 19, L 40-43.

**1.1.5 redundancy-based protocol** pg. 42, L 38-42; Fig. 11, pg.43, L29.

**1.1.6** The specifications of U.S. 6,374,079 (09/569,746) and 09/477,226 are included by reference in their entirety; pg. 1, L15 - 22.

**2.0** Applicant respectfully disagrees with Examiner’s comment that “Suguria’s “base station and wire line” comprise all of the attributes of the instant invention”. Nowhere does Suguria mention or suggest an internet connection, a sensor or an actuator. Suguria is solving a problem of locating mobile transmitters; how does this relate to controlling and/or reading a fixed home sensor and/or actuator?

**4.0** Examiner rejects claims 19, 22-24, 27-28, and 34-36 under 35 U.S.C. 103(a) as being unpatentable over U.S. 7,213,061 to Hite in view of U.S. 6,362,783 to Suguria.

**4.1** Applicant respectfully points out that U.S. 6,362,783 to Suguria, et al. has absolutely no relevance to the instant invention or to the invention of Hite. Suguria is disclosing a method

to locate a mobile radio transmitter. Please note the Abstract of U.S. 6,362,783:

*“A method of detecting **a position of a radio mobile station in radio communications**, which is capable of accurately and simply finding the position of the mobile station. At a measuring point the mobile station measures the reception radio strength levels from a plurality of base stations and conveys the measurement results through the base station to a control station. The control station learns, through a neural network, the correlation between the reception radio strength levels and the position of the mobile station on the basis of the measurement results at a plurality of measuring points and the positions of the measuring points. Subsequently, when the mobile station communicates to the control station the reception radio strength levels measured at an arbitrary point, the control station estimates the position of the mobile station, causing those measurement results, on the basis of the correlation obtained through the learning.”*

The words “internet” and “sensor” do not appear in the Suguria specification or claims.

**4.2** There is clearly no motivation to combine Hite and Suguria because the inventions are unrelated and have no common purpose or components. The instant invention, as well as Hite, make no use of “mobile radios” or neural networks or “measuring points”.

**4.3** With all due respect, Examiners comments in the last sentence of her 4.a. do not apply to the instant invention; the instant invention has no “mobile station”. The RF transmitter of the instant invention is of limited range and signal strength, in no way comparable to the radio transmitters of Suguria’s invention. There is no market pressure or design need or incentive to combine the Hite and Suguria inventions; the instant invention is already superior and lower cost for its applications. Suguria teaches no elements, including “base station” which are a simple substitution into the instant invention’s components; Suguria has

no relevance to the instant invention or to Hite.

**4.4** Examiner cites that Suguria teaches a “base station” comprising a “wireline”. Please note in §14 L15:

*“...and **a base station** 105 is made up of a base station control section 106 for controlling the operation of the base station 106, a base station transmission and reception section 107 for signal transmission and reception to and from the mobile station 101, and a base station input and output section 108 for signal transmission and reception to and from a control station 111 through a wire line, and further the control station 111 is equipped with a control station control section 112 for controlling the operation of the control station 111, a communication control section 113 for controlling the communication with the base station 105, a position input section 114 for undergoing the input of coordinate data on a radio strength measuring point, position learning processing section 115 for learning, through a neural network, the correlation between the position of the mobile station 101 and the reception radio strength level at that point and for storing the correlation there between, and a position estimation processing section 116 for estimating the position of the mobile station 101 on the basis of the measured radio strength level through the use of the stored correlation. In FIG. 1, numerals 109 and 110 represent different base stations each having the same arrangement as that of the base station 105.”*

The fact that Suguria uses the terms “base station” and “wire” is not cause for relevance to the instant invention. The “control unit” of the instant invention communicates to sensors and actuators and is in RF communication with a “base station” which has internet access. The base stations and wire lines of Suguria have none of the attributes or features of the instant invention as detailed in the claims or specification. Suguria’s “wire line” and the

“wiring interface” of the instant invention are not interchangeable and do not provide the same functionality in the respective inventions other an electrical connection.

**6.0** Examiner rejects claims 29-33 under 35 U.S.C. 103(a) as being unpatentable over U.S. 7,213,061 to Hite in view of U.S. 6,826,607 to Gelvin. Applicant respectfully points out that Examiner failed to respond to Applicant’s arguments as presented in the Office Action Response of Dec. 13, 2007; in P2 Examiner says Applicant’s arguments are moot in view of new grounds of rejection.

**6.1** Applicant respectfully points out that neither Hite nor Gelvin teach a system comprising a base station and a control unit: such that the control unit produces control outputs for a particular home automated-system or appliance in response to input from sensing subsystems associated with the particular home automated-system or appliance and in response to other sensors associated with other home automated-systems or appliances as determined by the software-control module and the control code and wherein the redundancy-based networking protocol comprises a state wherein if one control unit is out of communication range with the base station another control unit may intercept communication on behalf of the out-of range control unit and retransmit to the out-of range control unit.

**6.2** In the instant invention sensors and actuators are accessible through a control unit, a condition clearly structurally different from Gelvin and Hite and stated in the claims of the instant invention.

**6.3** Applicant respectfully points out that the instant invention does not rely on a “low power distributed sensor network” since the sensors are associated with a control unit.

Additionally, a “10 Mbps Ethernet network” is not mentioned in the specification or claims

of the instant invention. Examiner's remarks with regard to combining Hite and Gelvin for an interface between the two do not make much sense.

**6.4** Applicant respectfully points out that the prior art references as relied upon by the Examiner as a §103 rejection do not contain, singularly or in combination, every element recited in the amended claims in as complete detail as is contained in the claims and arranged as recited in the claims.